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Search	Most Recent Queries	Time	Result
#8	Search **lymphangiogenesis and tumorigenesis** Limits: **Publication Date to 2003/12/9**	11:17:45	5
#5	Search **apelin and antisense**	07:46:21	2
#1	Search **"apelin antibody"**	07:26:51	10

Clear History

Apr 4 2007 12:47:27

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 Dialog level 05.17.01D
Last logoff:  28mar07 10:29:23
Logon file1 15apr07 13:28:52
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IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein
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Cost is in DialUnits
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B 155, 159, 10, 203, 35, 5, 467, 73, 434, 34
       15apr07 13:29:33 User290558 Session D102.1
            $0.98    0.279 DialUnits File1
     $0.98  Estimated cost File1
     $0.18  INTERNET
     $1.16  Estimated cost this search
     $1.16  Estimated total session cost   0.279 DialUnits

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  File 155:MEDLINE(R) 1950-2007/Apr 13
         (c) format only 2007 Dialog
  File 159:Cancerlit 1975-2002/Oct
         (c) format only 2002 Dialog
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S ANGIOGENESIS AND APELIN
          159120  ANGIOGENESIS
             648  APELIN
      S1      24  ANGIOGENESIS AND APELIN
?

S S1 AND ANTIBODY
              24  S1
         1836405  ANTIBODY
      S2       0  S1 AND ANTIBODY
?


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S1         24   ANGIOGENESIS AND APELIN
S2          0   S1 AND ANTIBODY
?

RD S1
      S3      14  RD S1  (unique items)
?

S S3 AND (ANTAGONIST OR INHIBITOR)
              14  S3
          695516  ANTAGONIST
         1661159  INHIBITOR
      S4       2  S3 AND (ANTAGONIST OR INHIBITOR)
?

RD S4
      S5       2  RD S4  (unique items)
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  5/9/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
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18619910   BIOSIS NO.: 200510314410
 The Kruppel-like factor KLF2 is a novel inhibitor of angiogenesis via
 repression of the VEGF receptor VEGFR2 (KDR/flk-1)
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AUTHOR: SenBanerjee Sucharita (Reprint); Bhattacharya Resham; Wang Ping; Lin Zhiyong; Mukhopadhyay Debabrata; Jain Mukesh K
AUTHOR ADDRESS: Harvard Univ, Brigham and Womens Hosp, Sch Med, Boston, MA 02115 USA**USA
JOURNAL: Circulation 110 (17, Suppl. S): p173 OCT 26 2004 2004
CONFERENCE/MEETING: 77th Scientific Meeting of the American-Heart-Association New Orleans, LA, USA November 07 -10, 2004; 20041107
SPONSOR: Amer Heart Assoc
ISSN: 0009-7322
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background: The vascular endothelial growth factor (VEGF) receptor - VEGFR2 (KDR/flk-1) - is the major mediator of the mitogenic and angiogenic effects of VEGF. Studies from our laboratory implicate the transcription factor Kruppel-like factor-2 (KLF2) as a key regulator of endothelial function. In this study we provide evidence that KLF2 regulates VEGFR2 expression and, as a consequence, VEGF mediated angiogenesis. Methods and Results: Adenoviral overexpression of KLF2 (Ad-K2) in HUVEC strongly inhibited VEGFR2 (but not VEGFR1) mRNA and protein. Consistent with the reduction of VEGFR2 expression, VEGF mediated calcium mobilization and induction of 3[H]-thymidine uptake were strongly attenuated in KLF2 overexpressing cells. Furthermore, the importance of KLF2 as a regulator of VEGFR2 was verified by siRNA mediated knockdown studies that revealed an induction in basal VEGFR2 expression in HUVEC. To determine the molecular basis for KLF2-mediated inhibition of VEGR2, a series of promoter deletion and mutational analyses were undertaken. These studies demonstrate that KLF2 potently inhibits the VEGFR2 promoter (similar to 70%, p< 0.001) and localize this inhibitory effect to the proximal promoter region. Finally, to assess the functional consequences of KLF2's inhibition of VEGFR2, we injected Ad-VEGF(164) into the ears of athymic mice in the presence or absence of a control adenovirus (Ad-Ctrl)) or Ad-K2. In contrast to control adenovirus, KLF2 overexpression resulted in a marked reduction in vessel formation, CD34+ endothelial staining (see figure below), and tissue edema. Conclusion: These observations identify KLF2 as a novel inhibitor of VEGFR2 and angiogenesis.[GRAPHICS]vitro assays showing that apelin stimulates microvascular endothelial cell migration and proliferation. Conclusion: We conclude from these experiments that (1) apelin is a novel potent angiogenetic factor, (2) the apelin effect on angiogenesis may be mediated via PLC, PI3-kinase and eNOS signaling pathways, and (13) these data add to the profile of apelin/APJ signaling in the regulation of processes that impact tissue perfusion.

REGISTRY NUMBERS: 7440-70-2: calcium; 127464-60-2: vascular endothelial growth factor
DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular System--Transport and Circulation
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: HUVEC cell line (Hominidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
CHEMICALS & BIOCHEMICALS: calcium; vascular endothelial growth factor {VEGF}; Kruppel-like factor 2 {KKLF2}; vascular endothelial growth factor receptor 2 {flk-1}--expression
MISCELLANEOUS TERMS: angiogenesis; vessel formation; Meeting Abstract
CONCEPT CODES:

00520 General biology - Symposia, transactions and proceedings
02508 Cytology - Human
10064 Biochemistry studies - Proteins, peptides and amino acids
10069 Biochemistry studies - Minerals
14504 Cardiovascular system - Physiology and biochemistry
17002 Endocrine - General
BIOSYSTEMATIC CODES:
86215 Hominidae

5/9/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

18619909 BIOSIS NO.: 200510314409
The cardiovascular regulator apelin is an angiogenic factor in vivo
AUTHOR: Kundu Ramendra K (Reprint); Eichhorn Jens; Chen Mary; Ho Yen-Dong; Ashley Euan; Varner Judith; Kuo Calvin; Quertermous Thomas
AUTHOR ADDRESS: Stanford Univ, Palo Alto, CA 94304 USA**USA
JOURNAL: Circulation 110 (17, Suppl. S): p173 OCT 26 2004 2004
CONFERENCE/MEETING: 77th Scientific Meeting of the American-Heart-Association New Orleans, LA, USA November 07 -10, 2004; 20041107
SPONSOR: Amer Heart Assoc
ISSN: 0009-7322
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Objective: Given the embryonic endothelial cell-specific pattern of expression for the high affinity apelin receptor, APJ, we have employed and established in vivo assays to investigate the angiogenic potential of this signaling pathway, Methods and Results: In ovo chick chorioallantoic membrane assays, evaluated with vessel branch point counting, apelin-13 revealed a 3-fold maximal increase in angiogenesis that was 141% of the maximal effect of bFGF. In the rabbit cornea assay apelin-13 had a maximal angiogenic effect that was 43% of the maximal effect produced with VEGF. In the in vivo Matrigel assay, evaluated on the basis of hemoglobin content by Drabkin's assay and endothelial morphometry, a 4-fold increase in vascularization with apelin-13 was observed compared to a 5-fold increase with bFGF. To achieve these levels of angiogenesis, 2-10-fold higher molar concentrations of apelin-13 was required, suggesting this form of apelin may not be the most potent isoform for stimulating angiogenesis. To investigate signaling pathways that may mediate the apelin-induced angiogenesis, in vivo Matrigel assays were performed in the presence of pharmaceutical inhibitors. Inhibition of angiogenesis was observed for some inhibitors, including the PLC inhibitor U73122 (90% inhibition), eNOS inhibitor L-NAME (78% inhibition), and PI3-kinase inhibitor Wortmannin (90% inhibition) to the Matrigel plugs resulted in a significant decrease in apelin-Induced angiogenesis. The control inhibitor compound U73343 had no effect. These findings were confirmed in an in vitro Matrigel assay using human lung microvascular endothelial cells. Also, the in vivo angiogenesis assays were supported by in vitro assays showing that apelin stimulates microvascular endothelial cell migration and proliferation. Conclusion: We conclude from these experiments that (1) apelin is a novel potent angiogenetic factor, (2) the apelin effect on angiogenesis may be mediated via PLC, PI3-kinase and eNOS signaling pathways, and (13) these data add to the profile of apelin/APJ signaling in the regulation of processes that impact tissue perfusion.

REGISTRY NUMBERS: 19545-26-7: wortmannin; 112648-68-7: U73122; 50903-99-6: L-NAME; 217082-58-1: apelin-13; 372170-33-7: apelin
DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular System--Transport and Circulation
BIOSYSTEMATIC NAMES: Galliformes--Aves, Vertebrata, Chordata, Animalia; Leporidae--Lagomorpha, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: chicken (Galliformes); rabbit (Leporidae)
ORGANISMS: PARTS ETC: cornea--sensory system; chorioallantoic membrane--embryonic structure; lung microvascular endothelial cell--circulatory system, respiratory system
COMMON TAXONOMIC TERMS: Birds; Animals; Chordates; Lagomorphs; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Vertebrates
CHEMICALS & BIOCHEMICALS: wortmannin--enzyme inhibitor-drug; U73122--enzyme inhibitor-drug; PLC {phospholipase C}; eNOS {endothelial nitric oxide synthase}; PI3-kinase; L-NAME {N-G-nitro-L-arginine methyl ester}--enzyme inhibitor-drug; apelin-13; apelin--angiogenic factor, cardiovascular regulator
MISCELLANEOUS TERMS: cell proliferation; cell migration; Meeting Abstract
CONCEPT CODES:
00520 General biology - Symposia, transactions and proceedings
02506 Cytology - Animal
10064 Biochemistry studies - Proteins, peptides and amino acids
10068 Biochemistry studies - Carbohydrates
10802 Enzymes - General and comparative studies: coenzymes
14504 Cardiovascular system - Physiology and biochemistry
16004 Respiratory system - Physiology and biochemistry
20004 Sense organs - Physiology and biochemistry
25502 Development and Embryology - General and descriptive
BIOSYSTEMATIC CODES:
85536 Galliformes
86040 Leporidae
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